

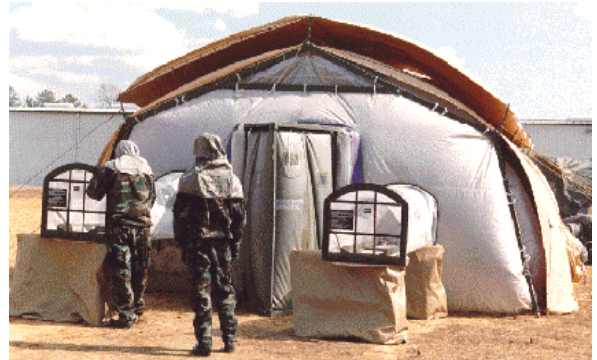


M28 SIMPLIFIED COLLECTIVE PROTECTION EQUIPMENT (CPE)

Background: The M20 Simplified Collective Protection Equipment (SCPE) was developed and type classified from Advanced Development in Jun 86. The SCPE Preplanned Product Improvement (P3I) Program included a 9-month dual contract award with a shoot-off to determine which contractor would be retained through type classification. The hardware design was evaluated through a Government and contractor conducted engineering design test. Concurrent technical tests and user tests were conducted on hardware manufactured to a level III technical data package. The SCPE P3I program generated the M20A1 SCPE and six M28 CPE configurations. Per direction from HQDA, technical test hardware was recalled to support Operation Desert Shield. A DA directed TC-LPU for the XM28 was accomplished in Dec 90, based on results of accelerated chemical testing performed by Dugway Proving Ground. The baseline test program resumed in Jan 92 using hardware from the limited production.

Physical Description: The M28 CPE is a highly transportable collective protection system used in conjunction with the Tent Extendable Modular Personnel (TEMPER). The modular system consists of agent resistant liner sections, protective entrance (PE), tunnel airlock for litter patients (TALP), hermetically sealed NBC filter canister (HSFC), recirculation filter, and a support kit containing a motor blower and ancillary equipment. These components are available separately as spare parts or packaged together into six basic M28 CPE configurations. A "Type II" M28 CPE liner configuration, developed exclusively for the Air Force, uses a slightly different liner interface design. The Type II liner components are currently available as spare parts only.

In addition to the basic M28 CPE components are vestibule liners, which allow interconnection of liner systems to create a larger protective area. Used in combination with ISO adapters, vestibule liners allow the addition of ISO shelters to the protective area. Also available is the CPE supply airlock, which provides a capability to bring palletized supplies or large equipment into the protective area. Basic M28 CPE components, in combination with vestibule liners, ISO liner adapters, and the CPE supply airlock provide a variety of options for configuring shelter complexes. Two examples of such shelter complexes are the Army's Chemically Protected Deployable Medical System, Hospital Unit Base (CP DEPMEDS HUB) and the Air Force's Chemically Hardened, Air-Transportable Hospital (CHATH).



M28 CPE Configurations

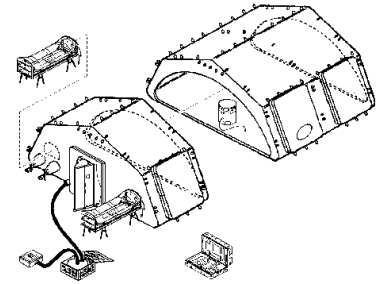
Nomenclature	NSN	UOC	Pkg Wt (lb)	Dim (cu ft)
NBC, Tent, M28 CPE, 16 ft	4240-01-330-7807	Z36	420	57
NBC, Tent, M28 CPE, 32 ft	4240-01-330-7808	Z37	706	99
NBC, Tent, M28 CPE, 48 ft	4240-01-331-2922	Z38	796	126
NBC, Tent, M28 CPE, 64 ft	4240-01-331-2923	Z39	1,082	168
NBC, Tent, M28 CPE, Patient Processing Unit	4240-01-330-7809	Z40	838	98
NBC, Tent, M28 CPE, 16 ft extension	4240-01-348-9751	Z48	330	42
NBC, Tent, M28 CPE,		R29		
NBC, Tent, M28 CPE, Type II *		252		

**Type II M28 CPE components are currently available as spare parts only.*

Use/Function: The M28 CPE is an inflatable shelter system used in conjunction with the TEMPER for medical or command post missions so personnel can perform their duties unencumbered by individual protective equipment. Its modular liner sections and airlocks allow for a variety of protective area configurations. M28 CPE liners and airlocks provide liquid agent protection for the sheltered area. The motor blower pressurizes the airlocks and modular liner sections, allowing them to take on the shape of the TEMPER. Exterior straps attach the liner sections to the TEMPER frame, and internal straps provide support for cloth liners, electrical wiring, and lights. The filtration system provides a source of clean air, protecting against chemical/biological warfare agents and radiological particles. Three types of pressurized airlocks are available for entry/exit of personnel, litter patients, and palletized supplies/equipment. The M28 CPE operates on 110 VAC / 60 Hz or European 220 VAC / 50 Hz (with adapters).

Requirement Documents:

- O&O Plan approved Sep 84
- Letter Requirement, TRADOC ACN 29837, approved Feb 85
- BOIP approved in Jan 87
- Conditional Release for Operation Desert Shield, Jan 91



Key Requirements:

- Provide a tunnel airlock for litter patients
- Recirculation filters to increase entry/exit rate
- Provide liquid agent resistance
- Allow for expansion of the protected area
- Interface with existing Army environmental control units
- Reduced generated electromagnetic interference (EMI)
- Provide clean, rodent- and pest-free environment

Acquisition Phase: The M28 CPE program is currently in the production phase. Technical testing was completed in Sep 92. M28 CPE type classification actions were completed in Dec 92. System management has been delegated to SBCCOM in Rock Island, IL.

Acquisition Milestones: Two firm fixed price production contracts have been awarded to date. The first contract was awarded in Apr 95 to ILC Dover, Inc., of Frederica, DE, for M28 CPE components. Deliveries were completed in Dec 96. A second contract was awarded in Sep 95 to Intellitec of DeLand, FL, for the M28 CPE components (including Type II components for the Air Force). Deliveries were completed in Jun 00. A third contract was awarded in Aug 00 to Production Products Manufacturing & Sales of St. Louis, MO. Deliveries are scheduled to begin in 1QFY02.

Points of Contact:

Office: CPE Team
Phone: Commercial (410) 436-5682, DSN 584-5682
Fax: Commercial (410) 436-3323, DSN 584-3323
Organization: Edgewood Chemical Biological Center, ATTN: AMSSB-REN-P, APG, MD 21010-5424

Office: M28 CPE Project Engineer
Phone: Commercial (410) 436-5767, DSN 584-5767
Fax: Commercial (410) 436-3323, DSN 584-3323
Organization: Edgewood Chemical Biological Center, ATTN: AMSSB-REN-P, APG, MD 21010-5424

Office: System Manager
Phone: Commercial (309) 782-5455, DSN 793-5455
Fax: Commercial (309) 782-1919, DSN 793-1919
Organization: SBCCOM, ATTN: AMSSC-HB (RI), Rock Island, IL 61299-7390